

**00000000000000000000000000000000**

The control unit (RE) of the invention has at least one control element (FA1...FA8), in particular with at least one integrating (FA6, FA8) and/or differentiating (FA7) transfer characteristic which is constructed as a temporally discrete dynamic fuzzy logic control element (FAX). A temporally discrete dynamic fuzzy logic control element (FAX) of this kind is for example a so-called fuzzy logic automaton, which has processing states ( $Zm'...Zn$ ). It is advantageous that the control unit of the invention can be constructed with control elements that each have systematically dynamic fuzzy logic properties, and in which nonlinearities can be introduced in a targeted way for a desired control performance.

Fig. 3

**Q**

Fig. 1 (Prior Art)

Fig. 2 (Prior Art)

**Fig. 3 FA1: Fuzzy Logic Control Element**

### FA3: Fuzzy Logic Control Element 2

#### FA4: Fuzzy Logic Control Element 3

P, I, D, PI = proportional, integral, differential, and proportional-integral

Fuzzy = Fuzzy Logic

**Figs. 7a, 7b:**

### F1: Fuzzyfication

## I1: Inference

### D1: Defuzzification

Art 10034

Drawing Captions

[Top to bottom, left to right, by block symbol etc.]

Fig. 1 (Prior Art)

FU: Fuzzy Logic System

Fig. 2 (Prior Art)

FU: Fuzzy Logic System

Fig. 3 FA1: Fuzzy Logic Control Element

Fig. 4 FA2: Fuzzy Logic Control Element 1

FA3: Fuzzy Logic Control Element 2

FA4: Fuzzy Logic Control Element 3

Figs. 5 and 6:

P, I, D, PI = proportional, integral, differential, and proportional-integral

Fuzzy = Fuzzy Logic

Figs. 7a, 7b:

F1: Fuzzyfication

I1: Inference

D1: Defuzzification